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Mineral Industry Surveys

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MOLYBDENUM IN OCTOBER 2004

Domestic production of molybdenum in concentrate in October 2004 was about 8% more than that of the previous month and was about 26% more than that of October 2003, according to the U.S. Geological Survey. Year-to-date production of molybdenum in concentrate from January through October was 18% more than during the same period in 2003. Producer stocks of molybdenum in concentrate, oxide, and other product forms were about 4,730 metric tons (t) at the beginning of 2004 and 4,910 t at the end of October.

According to Ryan's Notes (2004b), the October monthly average prices for U.S. ferromolybdenum (FeMo) ranged from $23.667 to $25.333 per pound of molybdenum content, compared with $21.250 to $23.125 in September. European FeMo monthly averages ranged from $58.444 to $61.889 per kilogram (kg) of molybdenum content in October as compared with $47.000 to $48.563 in September. In October, worldwide molybdenum oxide prices ranged from $20.972 to $21.856 per pound versus $17.844 to $18.431 in September.

Ferromolybdenum prices surged upward more than $10 per kg compared with prices in September. European traders reported FeMo spot prices as high as $64 per kg. Several truckloads were reported to have been sold for November and December at $62 per kg. A few molybdenum consumers, tired of waiting for prices to soften, reportedly booked FeMo business for January at $60 per kg. With forward buying taking place, more traders are convinced prices will hold through the end of the year (Ryan's Notes, 2004a).

While FeMo prices moved upward, molybdenum oxide prices lagged as trade sources reported sales at $22 per pound. That price, according to one producer agent, equated to FeMo at a cost price of $51 per kg after conversion. At current prices for FeMo that would result in over a $10 profit per kg, a huge margin (Platts Metals Week, 2004).

Germany's Steel Federation announced it planned to open a review of the European Commission's antidumping duty on Chinese molybdenum imports. A duty of 22.5% was placed on Chinese-origin FeMo by the European Commission in January 2002 after a finding that dumping of Chinese material had caused harm to the European FeMo industry. Specialty steel makers have been affected adversely by the current high prices and limited supply (Metal Bulletin Research, 2004).

Included in this Mineral Industry Surveys are U.S. production and shipments of molybdenum concentrates and materials, U.S. consumption by end use, stocks of molybdenum material in September and October 2004, and trade data for August and September 2004.

References Cited

Metal Bulletin Research, 2004, Molybdenum highlights, German Steel Federation keen to review AD duties on Chinese material: Metal Bulletin Research, Ferro-alloys Monthly, no. 146, October 27, p. 14.

Platts Metals Week, 2004, Ferromoly prices spike on active demand: Platts Metals Week, v. 75, no. 42, October 18, p. 13.

Ryan's Notes, 2004a, Forward moly buying signals strength: Ryan's Notes, v. 10, no. 42, October 18, p. 1.

Ryan's Notes, 2004b, [untitled]: Ryan's Notes, v. 10, no. 44, October 4, p. 4.

TABLE 1
U.S. SALIENT MOLYBDENUM CONCENTRATE STATISTICS[1]

(Metric tons, contained molybdenum)

	2003	2004		
	January-December	September	October	Year to date
Production	33,500	3,280	3,550	33,600
Shipments:[2]				
Domestic	25,900	2,700 r	2,710	25,300
Export	7,660	791 r	917	8,420

rRevised.
[1]Data are rounded to no more than three significant digits.
[2]As reported by producers.

TABLE 2
U.S. REPORTED PRODUCTION AND SHIPMENTS OF MOLYBDENUM PRODUCTS[1]

(Metric tons, contained molybdenum)

	2003	2004		
	January-December	September	October	Year to date
Gross production	41,400	6,670	6,330	53,800
Internal consumption[2]	29,600	4,320	3,890	33,800
Gross shipments	30,100	3,770	3,410	32,500

[1]Data are rounded to no more than three significant digits.
[2]Includes molybdic oxides, metal powder, ammonium molybdate, sodium molybdate, and other.

TABLE 3

U.S. REPORTED CONSUMPTION, BY END USES, AND CONSUMER STOCKS OF MOLYBDENUM MATERIALS[1]

(Kilograms, contained molybdenum)

End use	Molybdic oxides	Ferro molyb-denum[2]	Ammonium and sodium molybdate	Molyb-denum scrap	Other	Total
2004, September:						
Steel:						
Carbon	27,900 r	W	--	--	W	27,900 r
High-strength low-alloy	35,100 r	11,400 r	--	--	11,300	57,900 r
Stainless and heat-resisting	202,000	65,100	--	W	6,780	274,000
Full alloy	122,000 r	173,000 r	--	--	1,510	297,000 r
Tool	59,700	W	--	--	--	59,700
Total	447,000 r	250,000 r	--	W	19,600	716,000 r
Cast irons (gray, malleable, and ductile iron)	W	9,010	--	--	763	9,780
Superalloys	81,500 r	W	--	(3)	93,300 r	175,000 r
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	6	6
Other alloys	88	4,420	--	--	20	4,530
Mill products made from metal powder [4]	--	--	--	--	140,000	140,000
Cemented carbides and related products[5]	--	--	--	--	W	W
Chemical and ceramic uses:						
Pigments	--	--	W	--	--	W
Catalysts	77,300	--	W	--	W	77,300
Other chemicals	--	--	--	--	1,320	1,320
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	14,500	14,500
Other	1,090	43,600	79,300	16	16,800	141,000
Grand total	607,000 r	307,000 r	79,300	16	286,000 r	1,280,000 r
Stocks, September 30, 2004	434,000 r	241,000	4,820	20,200 r	859,000	1,560,000 r
2004, October:						
Steel:						
Carbon	32,200	W	--	--	W	32,200
High-strength low-alloy	32,500	19,600	--	--	11,300	63,400
Stainless and heat-resisting	211,000	66,500	--	W	6,780	285,000
Full alloy	137,000	171,000	--	--	1,510	309,000
Tool	31,700	W	--	--	--	31,700
Total	445,000	257,000	--	W	19,600	721,000
Cast irons (gray, malleable, and ductile iron)	W	9,000	--	--	763	9,760
Superalloys	86,100	W	--	(3)	115,000	201,000
Alloys: (other than steels, cast irons, and superalloys)						
Welding materials (structural and hard-facing)	--	W	--	--	6	6
Other alloys	112	1,930	--	--	20	2,060
Mill products made from metal powder [4]	--	--	--	--	143,000	143,000
Cemented carbides and related products[5]	--	--	--	--	W	W
Chemical and ceramic uses:						
Pigments	--	--	W	--	--	W
Catalysts	77,300	--	W	--	W	77,300
Other chemicals	--	--	--	--	1,320	1,320
Miscellaneous and unspecified uses:						
Lubricants	--	--	--	--	10,600	10,600
Other	1,090	45,300	75,300	16	16,800	138,000
Grand total	609,000	313,000	75,300	16	306,000	1,300,000
Stocks, October 31, 2004	406,000	304,000	5,840	15,100	861,000	1,590,000

[r]Revised. W Withheld to avoid disclosing company proprietary data; included in "Other" of the "Miscellaneous and unspecified uses" category. -- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes calcium molybdate.

[3]Included in "Other" of the "Superalloys" category.

[4]Includes ingot, wire, rod, and sheet.

[5]Includes construction, mining, oil and gas, metalworking machinery.

TABLE 4
U.S. EXPORTS OF MOLYBDENUM ORES AND CONCENTRATES
(including roasted concentrate), BY COUNTRY[1]

(Kilograms, contained molybdenum)

Country	2003 January-December	2004 August	2004 September	2004 Year to date
Australia	102,000	--	--	19,000
Austria	--	124,000	496,000	1,310,000
Belgium	3,190,000	896,000	1,030,000	5,370,000
Brazil	42,600	7,300	2,450	21,700
Canada	910,000	229,000	96,800	1,050,000
Chile	368,000	--	--	1,380,000
China	82,600	--	--	36,000
Costa Rica	22,500	3,430	1,230	26,000
India	44,300	--	430	430
Italy	20,300	--	--	--
Japan	2,000,000	1,350,000	876,000	5,370,000
Korea, Republic of	61,400	3,260	6,100	85,800
Mexico	3,730,000	929,000	667,000	2,830,000
Netherlands	10,900,000	1,510,000	2,610,000	12,000,000
Sweden	25,700	--	--	--
Taiwan	9,590	1,230	5,670	18,600
United Kingdom	7,880,000	989,000	1,260,000	6,940,000
Other	137,000	339,000	805,000	2,540,000
Total	29,500,000	6,380,000	7,850,000	39,000,000

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF FERROMOLYBDENUM, BY COUNTRY[1]

(Kilograms, contained molybdenum)

Country	2003 January-December	2004 August	2004 September	2004 Year to date
Australia	873	--	--	1,090
Canada	547,000	46,100	35,400	701,000
Denmark	241	--	--	--
Japan	61	--	--	--
Mexico	43,100	654	--	33,700
Netherlands	25,500	--	--	--
United Kingdom	--	--	--	491
Total	617,000	46,800	35,400	736,000

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 6

U.S. IMPORTS FOR CONSUMPTION OF MOLYBDENUM PRODUCTS[1]

(Kilograms, unless otherwise specified)

	January-December 2003			September 2004		
Material	Gross weight	Contained molybdenum	Value (c.i.f.)[2] (thousands)	Gross weight	Contained molybdenum	Value (c.i.f.)[2] (thousands)
Ore and concentrates roasted	6,310,000	3,960,000	$41,900	485,000	306,000	$9,900
Ore and concentrates other	2,870,000	1,230,000	9,580	769,000	381,000	12,800
Molybdenum chemicals:						
Oxides and hydroxides	1,300,000	NA	9,780	32,300	NA	660
Molydates of ammonium	1,620,000	937,000	11,600	218,000	192,000	2,520
Molydates (all others)	324,000	145,000	1,200	783	194	14
Molybdenum orange	987,000	NA	4,440	88,800	NA	379
Ferromolybdenum	5,740,000	3,690,000	38,200	1,110,000	714,000	24,000
Molybdenum powders	57,000	43,100	2,000	8,250	7,100	419
Molybdenum unwrought	139,000	136,000	1,700	20,000	20,000	696
Molybdenum waste and scrap	425,000	388,000	5,000	28,500	27,800	1,100
Molybdenum wire	10,600	NA	776	2,180	NA	220
Molybdenum other	79,900	NA	6,420	8,930	NA	1,260
Total	19,900,000	10,500,000	133,000	2,770,000	1,650,000	54,000

NA Not available.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Cost, insurance, and freight at U.S. ports.

Source: U.S. Census Bureau.